

## **PUBLIC WORKS DEPARTMENT**

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Date:

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From:

Tim LaPorte, P.E., Public Works Director

To:

2002 City of Kent Surface Water Design Manual Users

Copy:

Ben Wolters, Economic & Community Development Director

Fred Satterstrom, Planning Services Director Mike Gillespie, P.E., P.L.S, Development Manager

Mike Mactutis, P.E., Environmental Engineering Manager

Mark Howlett, P.E., Design Engineering Manager

Jeff Watling, Parks Director

RE:

Blanket Adjustment 2010-1 for the 2002 City of Kent Surface Water Design

Manual

The City of Kent reviewed the requirements within the National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Stormwater permit and the required deadline of February 16, 2010 for portions of the permit for consideration of modification into the 2002 City of Kent Surface Water Design Manual.

Below is the statement in the NPDES Phase II permit from section S5.C.4. Controlling Runoff from New Development, Redevelopment and Construction Sites:

## 4. <u>Controlling Runoff from New Development, Redevelopment and Construction</u> Sites

Each Permittee shall develop, implement, and enforce a program to reduce pollutants in stormwater runoff to a regulated small municipal separate storm sewer systems (MS4) from new development, redevelopment, and construction site activities. This program shall be applied to all sites that disturb a land area 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale. The program shall apply to private and public development, including roads. The "Technical Thresholds" in Appendix 1 shall be applied to all sites 1 acre or greater, including projects less than one acre that are part of a larger common plan of the development or sale.

The Public Works Department, in reviewing the deadline and the language above is adjusting its 2002 City of Kent Surface Water Design Manual to include the following revisions. An update of the manual is underway to use the same nomenclature as the 2005 Washington Department of Ecology Stormwater Management Manual of Western Washington.

SECTION 1.1 DRAINAGE REVIEW Key Definitions and SECTION 1.2.3.1 AREA-SPECIFIC FLOW CONTROL STANDARDS (Page 5.1-32) shall be revised to read:

<sup>23</sup>Existing site conditions shall mean the native vegetation and soils that existed at a site prior to the influence of Euro-American settlement. Existing site conditions outside of the Lower Mill Creek, Lower Springbrook Creek, Lower Garrison Creek or within the Green River Natural Resource Area as shown on the Flow Control Application Map shall be assumed to be forested land cover unless reasonable, historic information is provided that indicated the site was prairie prior to settlement.

Otherwise, if the site disturbs less than 1 acre in size or is located in the Lower Mill Creek, Lower Springbrook Creek, Lower Garrison Creek, or the Green River Natural Resource Area, the existing site condition shall depend on what, if any, land conversion activity has occurred at the site since December 1978, when Kent first required flow control for new development (Ordinance 2130). If a drainage plan has been approved by the City since December 1978 (or since 1979 by the County) for any land conversion activity and the plans indicate a stormwater management system was designed according to standards in place at the time, and the same system shown on the approved plan was constructed and is still operating according to the design, then existing site conditions are those created by the site improvements, in this case, including any drainage facilities constructed per the approved engineering plans. The project proponent will be required to submit such documentation to the Public Works Department. Otherwise, existing site conditions are those that were present in December 1978 (or since 1979 by the County) as determined from aerial photographs and, if necessary, or knowledge of individuals familiar with the area. The intent is to mitigate unaddressed impacts created by site alterations or improvements, such as clearing, which has occurred since December 1978.

Under SECTION 1.1.1 PROJECTS REQUIRING DRAINAGE REVIEW, Threshold, the following shall be added:

7. Does the Project convert ¾ acres of native vegetation to lawn or landscaped areas, or convert 2.5 acres of native vegetation to pasture?

Under SECTION 1.1.2.3 FULL DRAINAGE REVIEW, Threshold, the following shall be added:

Projects converting ¾ acres of native vegetation to lawn or landscaped areas, or convert 2.5 acres of native vegetation to pasture.

Figure 1.1.2.A FLOW CHART FOR DETERMING TYPE OF DRAINAGE REVIEW REQUIRED shall be modified with the additional statement in the middle box on the left side:

Does the project add  $\geq$  2,000 sf of new impervious surface within a Landslide Hazard Drainage Area (LHDA) or  $\geq$  5,000 sf outside of a LHDA OR is it a redevelopment project costing  $\geq$  \$500,000 that creates  $\geq$  5,000 sf of contiguous pollution generating impervious surface (PGIS) from new and/or replaced impervious surface OR does the project convert  $\geq$ 34 acres of native vegetation to lawn or landscaped areas, OR does the project convert 2.5 acres of native vegetation to pasture?

TABLE 1.1.2.A REQUIREMENTS APPLIED UNDER EACH DRAINAGE REVIEW TYPE – FULL DRAINAGE REVIEW shall be modified to read:

All projects, including redevelopment projects that add  $\geq 5,000$  sf (2,000 sf of new impervious surface within a Landslide Hazard Drainage Area) of new impervious surface but do not qualify for Small Site Drainage Review OR a redevelopment projects costing  $\geq \$500,000$  that create  $\geq 5,000$  sf of contiguous PGIS from new and/or replaced impervious surface OR convert  $\geq 3/4$  acres of native vegetation to lawn or landscaped areas, OR convert  $\geq 2.5$  acres of native vegetation to pasture.

SECTION 1.2.3.2 Flow Control Implementation Requirement, Use of Underground Facilities, is revised to read:

Open ponds are preferred over underground detention facilities (vaults or tanks), because open vegetated ponds provide additional stormwater treatment in addition to quantity controls. Storage vaults / tanks also require excessive maintenance costs compared to ponds and applicants are encouraged to compare the economic cost benefit when considering.

Underground vaults are permitted to meet detention requirements for new developments on commercial or industrial parcels and within residential developments only when they will be privately maintained, provide pretreatment prior to flow entering the vault in addition to the minimum water quality treatment requirement, and are outside of the Lower Mill Creek, Lower Garrison Creek, or Lower Springbrook Creek Basins. In additions, underground vaults or tanks shall not be permitted for redevelopments where there is an existing pond or where there is area available for an open pond, regardless of the size of the parcel areas for the proposed redevelopment.

Pretreatment shall be defined as stated in the 2005 Washington Department of Ecology Stormwater Management Manual for Western Washington, Volume 5 – Runoff Treatment BMPs or as otherwise approved by the Washington Department of Ecology.